

Atty. Dkt. No. 01CR052/KE

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow. Claims 1, 7, 8, and 13 are currently being amended. Claims 17-20 are being added.

This amendment adds and changes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claims remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-20 are now pending in this application.

In paragraph 1 of the Office Action, Claim 8 is objected to for informalities. The Examiner has amended Claim 8 in accordance with the Examiner's suggestion. Accordingly, withdrawal of the objection to Claim 8 is respectfully requested.

In paragraph 2 of the Office Action, Claims 1-16 are rejected under 35 U.S.C. § 102(b) as being anticipated by Fornes, "Proposal for an ALM Open Architecture" (Fornes). The Examiner states:

With respect to Claims 1, 7, and 13, Fornes discloses . . . automatic link maintenance (ALM) architecture for use in STANAG 5066 system . . . ALM operation requires exchange of messages between two peer HF nodes . . . Fornes discloses . . . a technique for determining the optimum transmission parameters values for peer nodes (wherein first unit and second unit communicate data at a data rate selected in response to the first LQA and second LGA value) by exchanging recommendations (LQAs) or list of parameters and their standard values . . . Herein, the determination includes at least the initial stage . . . , exchanged stages . . . and acknowledged stage.

Applicants respectfully traverse the rejection and the Examiner's comment that Fornes discloses determining optimum transmission parameters during the initial stage.

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Applicants have amended Claims 1, 7, and 13 to recite that the invention is related to operation at the initial linking stage. Claim 1 recites:

wherein the first unit provides an LQA command to the second unit during initial linking

Claim 7 recites:

the first LQA being received during link initialization.

Claim 13 recites:

receiving a quality command signal during link initialization;

recording a quality command value . . . during link initialization

The use of quality command or LQA signals during link initialization has significant advantages.

Before the present invention, link initialization is performed at a fixed slow rate according to the STANAG 5066 standard. The present application states:

Unit 12 transmits an acknowledgment of value quality parameter (e.g., acknowledged phase). Units 12 and 14 communicate according to a data rate and interleaving parameter set in response to the link quality determinations made by units 12 and 14. For example, unit 12 can compare the quality measurements in accordance with minimum, maximum and default quality values which have been provided as initial parameters. In this way, units 12 and 14 are not required to initially communicate at a fixed data rate or a preset interleaving characteristic.

This technique is different than the STANAG 5066 systems disclosed in the Background of the Invention of the present application. Paragraph C.6.4.1 of STANAG 5066 states:

All connections on which the data rate or other modem parameters can be controlled shall be initiated at 300 bits per second using short interleaving. Thus, the present invention fills the need for an

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initial adaptive data rate algorithm which does not rely on a low initial data rate.

See present application, paragraph 13. Therefore, the present invention overcomes the low initial data rate associated with prior art STANAG 5066 systems.

Fornes appears to rely on a system similar to that described in the Background of the Invention of the present application. Fornes does not discuss the initialization mode. The rate adaptation algorithms of Fornes appear to be used after the initialization mode. Indeed, the fact that "two peer ALM can go back to the previous transmission parameter values and take another decision" indicates that the ALM is acting after initialization mode. See Fornes, page 25/5. Accordingly, each and every limitation in independent Claims 1, 7, and 13 is not shown, described or suggested in Fornes. Accordingly, withdrawal of the rejection of Claim 1 and its dependent Claims 2-6, Claim 7 and its dependent Claims 8-12, and Claim 13 and its dependent Claims 14-20 is respectfully requested.

Further, it is respectfully submitted that various dependent claims recite features which are not shown, described, or suggested in Fornes. For example, the use of the particular types of bit fields recited in Claims 14, 15, and 19 are not discussed in Fornes. Further, interleaving as recited in dependent Claims 2, 3, 4, 13 and 18 is not shown, described, or suggested. Therefore, dependent Claims 2, 3, 4, 13, 14, 15 and 19 are additionally patentable over Fornes.

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 18-1722. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even

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entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 18-1722. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. § 1.136 and authorize payment of any such extensions fees to Deposit Account No. 18-1722.

Respectfully submitted,

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